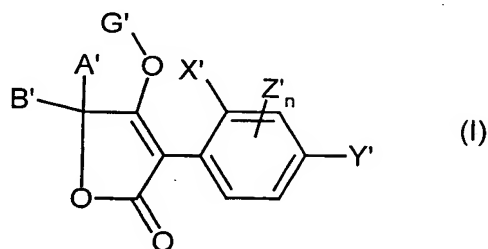


Patent claims

1. Composition for controlling animal pests, comprising a synergistically effective mixture of compounds of the formula (I)



in which

10 X' represents C<sub>1</sub>-C<sub>6</sub>-alkyl, halogen, C<sub>1</sub>-C<sub>6</sub>-alkoxy or C<sub>1</sub>-C<sub>3</sub>-halogenoalkyl,

Y' represents hydrogen, C<sub>1</sub>-C<sub>6</sub>-alkyl, halogen, C<sub>1</sub>-C<sub>6</sub>-alkoxy, C<sub>1</sub>-C<sub>3</sub>-halogenoalkyl,

15 Z' represents C<sub>1</sub>-C<sub>6</sub>-alkyl, halogen, C<sub>1</sub>-C<sub>6</sub>-alkoxy,

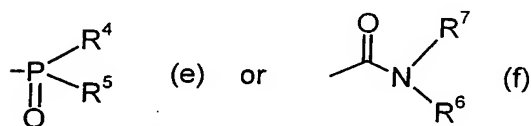
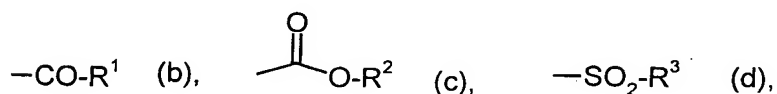
n represents a number from 0-3,

20 A' and B' are identical or different and represent hydrogen or optionally halogen-substituted straight-chain or branched C<sub>1</sub>-C<sub>12</sub>-alkyl, C<sub>3</sub>-C<sub>8</sub>-alkenyl, C<sub>3</sub>-C<sub>8</sub>-alkinyl, C<sub>1</sub>-C<sub>10</sub>-alkoxy-C<sub>2</sub>-C<sub>8</sub>-alkyl, C<sub>1</sub>-C<sub>8</sub>-polyalkoxy-C<sub>2</sub>-C<sub>8</sub>-alkyl, C<sub>1</sub>-C<sub>10</sub>-alkylthio-C<sub>2</sub>-C<sub>8</sub>-alkyl, cycloalkyl having 3-8 ring atoms which may be interrupted by oxygen and/or sulphur, and optionally halogen-, C<sub>1</sub>-C<sub>6</sub>-alkyl-, C<sub>1</sub>-C<sub>6</sub>-halogenoalkyl-,  
25 C<sub>1</sub>-C<sub>6</sub>-alkoxy-, C<sub>1</sub>-C<sub>6</sub>-halogenoalkoxy-, nitro-substituted phenyl or phenyl-C<sub>1</sub>-C<sub>6</sub>-alkyl,

or in which

A' and B' together with the carbon atom to which they are attached represent a saturated or unsaturated 3- to 8-membered ring which is optionally interrupted by oxygen and/or sulphur and optionally substituted by halogen, C<sub>1</sub>-C<sub>6</sub>-alkyl, C<sub>1</sub>-C<sub>6</sub>-alkoxy, C<sub>1</sub>-C<sub>4</sub>-halogenoalkyl, C<sub>1</sub>-C<sub>4</sub>-halogenoalkoxy, C<sub>1</sub>-C<sub>4</sub>-alkylthio or optionally substituted phenyl or is optionally benzo-fused,

G' represents hydrogen (a) or represents the groups



in which

R<sup>1</sup> represents optionally halogen-substituted C<sub>1</sub>-C<sub>20</sub>-alkyl, C<sub>2</sub>-C<sub>20</sub>-alkenyl, C<sub>1</sub>-C<sub>8</sub>-alkoxy-C<sub>2</sub>-C<sub>8</sub>-alkyl, C<sub>1</sub>-C<sub>8</sub>-alkylthio-C<sub>2</sub>-C<sub>8</sub>-alkyl, C<sub>1</sub>-C<sub>8</sub>-polyalkoxy-C<sub>2</sub>-C<sub>8</sub>-alkyl or cycloalkyl having 3-8 ring atoms which may be interrupted by oxygen and/or sulphur atoms,

represents optionally halogen-, nitro-, C<sub>1</sub>-C<sub>6</sub>-alkyl-, C<sub>1</sub>-C<sub>6</sub>-alkoxy-, C<sub>1</sub>-C<sub>6</sub>-halogenoalkyl-, C<sub>1</sub>-C<sub>6</sub>-halogenoalkoxy-substituted phenyl;

represents optionally halogen-, C<sub>1</sub>-C<sub>6</sub>-alkyl-, C<sub>1</sub>-C<sub>6</sub>-alkoxy-, C<sub>1</sub>-C<sub>6</sub>-halogenoalkyl-, C<sub>1</sub>-C<sub>6</sub>-halogenoalkoxy-substituted phenyl-C<sub>1</sub>-C<sub>6</sub>-alkyl,

represents optionally halogen- and/or C<sub>1</sub>-C<sub>6</sub>-alkyl-substituted pyridyl, pyrimidyl, thiazolyl and pyrazolyl,

5 represents optionally halogen- and/or C<sub>1</sub>-C<sub>6</sub>-alkyl-substituted phenoxy-C<sub>1</sub>-C<sub>6</sub>-alkyl,

R<sup>2</sup> represents optionally halogen-substituted C<sub>1</sub>-C<sub>20</sub>-alkyl, C<sub>2</sub>-C<sub>20</sub>-alkenyl, C<sub>1</sub>-C<sub>8</sub>-alkoxy-C<sub>2</sub>-C<sub>8</sub>-alkyl, C<sub>1</sub>-C<sub>8</sub>-polyalkoxy-C<sub>2</sub>-C<sub>8</sub>-alkyl,

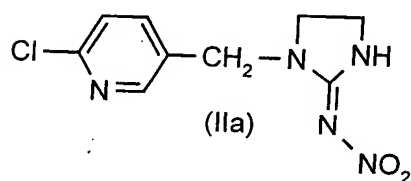
10 represents optionally halogen-, nitro-, C<sub>1</sub>-C<sub>6</sub>-alkyl-, C<sub>1</sub>-C<sub>6</sub>-alkoxy-, C<sub>1</sub>-C<sub>6</sub>-halogenoalkyl-substituted phenyl or benzyl,

15 R<sup>3</sup>, R<sup>4</sup> and R<sup>5</sup> independently of one another represent optionally halogen-substituted C<sub>1</sub>-C<sub>8</sub>-alkyl, C<sub>1</sub>-C<sub>8</sub>-alkoxy, C<sub>1</sub>-C<sub>8</sub>-alkylamino, di-(C<sub>1</sub>-C<sub>8</sub>)-alkylamino, C<sub>1</sub>-C<sub>8</sub>-alkylthio, C<sub>2</sub>-C<sub>5</sub>-alkenylthio, C<sub>2</sub>-C<sub>5</sub>-alkinylthio, C<sub>3</sub>-C<sub>7</sub>-cycloalkylthio, represent optionally halogen-, nitro-, cyano-, C<sub>1</sub>-C<sub>4</sub>-alkoxy-, C<sub>1</sub>-C<sub>4</sub>-halogenoalkoxy-, C<sub>1</sub>-C<sub>4</sub>-alkylthio-, C<sub>1</sub>-C<sub>4</sub>-halogenoalkylthio-, C<sub>1</sub>-C<sub>4</sub>-alkyl-, C<sub>1</sub>-C<sub>4</sub>-halogenoalkyl-substituted phenyl, phenoxy or phenylthio,

20 R<sup>6</sup> and R<sup>7</sup> independently of one another represent optionally halogen-substituted C<sub>1</sub>-C<sub>20</sub>-alkyl, C<sub>1</sub>-C<sub>20</sub>-alkoxy, C<sub>2</sub>-C<sub>8</sub>-alkenyl, C<sub>1</sub>-C<sub>20</sub>-alkoxy-C<sub>1</sub>-C<sub>20</sub>-alkyl, represent optionally halogen-, C<sub>1</sub>-C<sub>20</sub>-halogenoalkyl-, C<sub>1</sub>-C<sub>20</sub>-alkyl- or C<sub>1</sub>-C<sub>20</sub>-alkoxy-substituted phenyl, 25 represent optionally halogen-, C<sub>1</sub>-C<sub>20</sub>-alkyl-, C<sub>1</sub>-C<sub>20</sub>-halogenoalkyl- or C<sub>1</sub>-C<sub>20</sub>-alkoxy-substituted benzyl or together represent a C<sub>2</sub>-C<sub>6</sub>-alkylene ring which is optionally interrupted by oxygen,

30 and at least one agonist and/or antagonist of nicotinic acetylcholine receptors.

2. Composition according to Claim 1, comprising compounds of the formula (I) and the agonist and/or antagonist of nicotinic acetylcholine receptors in a ratio of from 1:100 to 100:1.
3. Use of a synergistically effective mixture comprising compounds of the formula (I) according to Claim 1 and at least one agonist and/or antagonist of nicotinic acetylcholine receptors for controlling animal pests.
4. Process for preparing pesticides, characterized in that a synergistically effective mixture comprising compounds of the formula (I) according to Claim 1 and at least one agonist and/or antagonist of nicotonic acetylcholine receptors is mixed with extenders and/or surfactants.
5. Mixtures according to Claim 1 or 2, comprising at least one of the following compounds



or

